INTERNATIONAL SEARCH REPORT

Interplication No PCT/US2004/021028

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L27/26 H04L1/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 - H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

Category °	Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.
х	SUMEI SUN; WIEMER I; HO C K; TJHUNG T T: "Training sequence assisted channel estimation for MIMO OFDM" WCNC 2003 - IEEE WIRELESS COMMUNICATIONS AND NETWORKING CONFERENCE, vol. 1, 13 March 2003 (2003-03-13), pages 38-43, XP002304707	1-25
A	NEW ORLEANS, LA, USA the whole document	26-29
X A	US 2003/016621 A1 (LI YE) 23 January 2003 (2003-01-23)	1-25 26-29
	paragraphs '0007!, '0008! paragraphs '0043! – '0053! ————	
	-/	

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
23 November 2004	29/11/2004
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Yang, Y

INTERNATIONAL SEARCH REPORT

Intentional Application No PC1/US2004/021028

		PCT/US200	4/021028
C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	y ° Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
A	MYEONGCHEOL SHIN ET AL: "A new training symbol structure to enhance the performance of channel estimation for mimo-ofdm systems" 2003 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING. PROCEEDINGS. (ICASSP). HONG KONG, APRIL 6 - 10, 2003, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING (ICASSP), NEW YORK, NY: IEEE, US, vol. VOL. 1 OF 6, 6 April 2003 (2003-04-06), pages IV397-IV400, XP010641180 ISBN: 0-7803-7663-3 the whole document		

INTERNATIONAL SEARCH REPORT

International Application No PCI/US2004/021028

Patent document clted in search report	Publication date	Patent family member(s)	Publication date
US 2003016621 A1	23-01-2003	CA 2385358 A1 JP 2002368719 A	21-11-2002 20-12-2002